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50X1-HUMNIKOLAY NIKOLAYEVICH SLAVYANOV

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The famous Russian scientist and hydrogeologist Nikolay Nikolayevich Slavyanov was born 13 June 1878 at Votkinskiy Plant, Sarapul'skiy District, Vyatskiy Region. His father, Nikolay Gavrilovich Slavyanov, was a skillful engineer who, in the period 1890 to 1891, was granted patents by Russia, France, Germany, Austro-Hungary, and Belgium, for a method of electric welding. This method was also adopted by the US, Sweden, and Italy. The great vitality, initiative, and energy of the father were inherited by his son, Nikolay.

In 1898, after completing the course at the Perm Public School, Nikolay Nikolayevich entered the Petersburg Mining Institute, where he studied simultaneously at the mining and the industrial faculties. He worked part time at foundries, in electrical and mechanical workshops, as an inspector for artillery equipment, technician on various hydrogeological expeditions, and as an apprentice at the open-hearth-furnace shop of the Sormovo Plant.

Slavyanov finally completed his studies at the Petersburg Mining Institute in 1908, and immediately took up his scientific work in the field of geological research as an engineer on the geological committee; adjunct-geologist, geologist, and secretary of the hydrogeological section; senior geologist, consultant, and chief of the Cabinet of Mineral Waters [of the Petersburg Mining Institute?].

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In addition to his basic work, Slavyanov undertook research in many incidental fields of science as chief of the geological division of the Balneological Institute at Pyatigorsk, chief of the mining-geological division of the Kuban-Health-Resort Administration (1921 to 1924), consultant for a gas expedition of the Academy of Sciences USSR to the Kuznetsk coal field, and member of the division of subterranean waters of the Hydrological Institute at Leningrad. From 1928 to 1932, he was the senior hydrologist at the Hydrological Institute and consultant to the Bureau of Gas Deposits in Leningrad, as well as a member of the Scientific Council on Helium under Gosplan USSR.

In 1933, he was a senior scientific specialist and chief of the hydro-geological division, Geological Institute, Academy of Sciences USSR. In 1934, he moved with the Academy of Sciences USSR to Moscow.

From 1936 to 1940, Slavyanov added to his scientific stature by acting as consultant for the Moscow Geological Trust, the Central Commission on Resources, the Institute of Health Resorts, the Bureau of Paleozoic Studies, and was also a member of the Scientific Health Resort Council of the People's Commissariat of Public Health USSR.

During the period 1942 to 1943, he acted as consultant for the Far Eastern Geological Administration.

Since 1943, he has been deputy chairman of the Commission on Mineral Waters, Academy of Sciences USSR, and somewhat later, was appointed deputy director of the Laboratory of Hydrogeological Problems, Academy of Sciences USSR. Following Academician F. P. Savarenskiy's death, Slavyanov succeeded to the directorship of the laboratory.

In addition to his scientific work, Slavyanov also became active in the educational field. Soon after his graduation from the Mining Institute he began delivering lectures on geology and astronomy at the Second Shlissel'burg Night School for Workers (this school was later renamed the People's University).

In 1917, he was giving one of the seminars on mineral waters at the Balneological Courses for Doctors of the All-Russian Zemstvo [ural self-government bodies in Imperial Russia] Union in Pyatigorsk. From 1918 to 1921, he taught courses on geology, crystallography, and mineralogy in the natural science and medical faculties of the People's University at Pyatigorsk. In 1919, he was a docent at the Chair of Geology, Severo-Kavkaz Polytechnical Institute, and secretary of the Mining Faculty in Krasnodar. For the period 1920 to 1922, he gave lectures based on The Encyclopedia on Mining and Geology at the Pyatigorsk Workers Polytechnicum, where he simultaneously filled the position of dean of that establishment. In 1922, he taught a course on the geology of mineral waters at the Balneological Courses for Doctors of the Pyatigorsk Balneological Institute. From 1929 to 1930, the pedagogical activity of Slavyanov was transferred to Leningrad, where he started work as a Privatdocent at the Chair of Hydrogeology, Geographical Faculty, Leningrad University. In 1930 he became a professor at the Leningrad Mining Institute where he was appointed head of the Chair of Mineral Waters and was the organizer and first dean of the Hydrogeological Faculty.

Slavyanov's work at the Leningrad Mining Institute, even prior to the move of the Academy of Sciences USSR to Moscow, was closely coordinated with the Academy. During the period 1935 to 1940, he was chief of the Chair of Hydrogeology, Moscow Hydrometeorological Institute, and simultaneously professor at the Moscow Geologico-Surveying Institute (1935 - 1939), while, in 1940, he was also named a professor at the Chair of Geology, Geologico-Soil Faculty, Moscow University. During 1941 - 1942, he was active at the Moscow Institute of Transportation imeni I. V. Stalin and from 1942 to 1943, he was professor and chief of the Chair of Geology, Khabarovsk Institute of Transportation.

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During his many years as an educator, Slavyanov has been responsible for training many highly qualified specialists in the field of geology, hydrogeology, and hydrochemistry.

In addition to his educational service, Slavyanov has also had a fruitful scientific life. After he completed the courses at the Petersburg Mining Institute, he started work on Caucasian mineral waters under the tutelage of Prof. A. P. Gerasimovich. After that, and during the period 1909 to 1913, he carried out geological surveys in the Donets coal basin under the supervision of Prof. L. I. Lutugin; however, his previously acquired interest in mineral waters made him return to Caucasia to take up again the study of Caucasian mineral waters.

During 1912 - 1918, he achieved distinction for his hydrogeological studies of the mineral waters around Zheleznovodsk and Kumogorsk. During field studies, he was able to determine the source of the largest mineral spring at Zheleznovodsk and cap it. It was due to this achievement that local doctors honored him by naming the spring the Slavyanov Spring. During that same period, he also carried out some studies of the Kuban mineral waters and the Tambukan mud lakes in the vicinity of Pyatigorsk. In 1918, he conducted some geological investigations in the Zelenchuk and Teberdinsk coal fields. In 1919, he carried out similar geological studies for the Donbass coal fields. All this work bore an episodic character, and his main effort was directed toward studying the Caucasian mineral waters which he carried out more or less continuously from 1920 to 1921.

In addition to his studies on Caucasian mineral waters, Slavyanov conducted hydrogeological studies to determine a suitable water supply for the city of Anapa. He also did considerable work on studying and capping various springs in the Matsestinskiy and Psekupsk mineral water region (1923 - 1924). During that same period, he also conducted an investigation of the Yeysk mineral waters, the Zaporog mineral springs, and carried out hydrogeological studies of the Chumburg mud lakes in the Anapa region.

During 1925 - 1926, Slavyanov continued hydrogeological studies at the Psekupsk mineral springs. In addition, he acted as consultant on various projects: locating the proper site for the hydroelectric power station on the Baksan and Malko rivers in Caucasia; and assuring proper water supply to the Kaluzhskaya petroleum enterprises in Kuban Oblast and for the Kramatorskiy Plant in the Donbass.

In 1927, he was conducting hydrogeological studies in the Donbass region, and from 1928 to 1929, he was assigned to do research at the Shovi health resort in Georgia. At the same time, he was also asked to act as consultant on the Shollarskiy water system for Baku, as a consultant on the water supply for the grape sovkhoz at Dzhetmet, and he also carried out hydrogeological surveys at the Dzhaiva health resort in Southern Ossetia.

In 1930, Slavyanov's field of investigations was expanded. He acted as consultant for the Donets and Crimean Hydrogeological parties, investigated various aspects of water supply to the settlements of the Ulyanov Plant in Leningrad, and also acted as a specialist on matters concerning the Anapa and Novorossiysk water-supply systems.

In 1931, he participated in a general tour of the Tyan'-Shan, Altay, and Ural mineral springs. At the same time, he acted as a consultant for the Karakol gas and the Kopal-Arasansk hydrogeological parties in Tyan'-Shan. In 1932, he was a member of a group touring various mineral springs in the Leningrad area. The following year, he was called on to give his expert opinion on the mineral muds of the Sestroretsk region. From 1933 to 1935, he took part in the Far Eastern Complex Expedition, organized by the Academy of Sciences USSR, for the determination of a proper route for the Baykal-Amur railroad trunk line. On this expedition he had charge of the hydrogeological group. After his return from the expedition, he was assigned as an expert consultant for various hydrogeological projects in the Moscow, Gor'kiy, and Zapadnyy (Western) oblasts.

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From 1927 to 1938, he worked as a consultant for a group undertaking a project on Caucasian mineral waters. In that same period, he was also called on to utilize his knowledge and experience on various questions relating to the Sol'tsa, Staraya Russa, Khilovo, Lipetsk, Nizhniye Ser'gi, Klyuchi, Kur'i, Solikamsk, and Gubakha health resorts. In 1939, he transferred his base of operations and undertook studies of various mineral springs in Central Asia.

In 1940, he worked as a member of an academy brigade at the Jkhta Spa. In 1941, he was called on to review the work of the chemical laboratory, Balneological Institute at Pyatigorsk. At the same time he was also active in the work of the Commission on Hydrogeological Terminology, Academy of Sciences USSR.

During World War II, Slavyanov conducted studies of mineral-water springs in western Siberia. He also acted as consultant on various coal surveys in the Stalinsk, Leninsk, and Kemerovo regions of the Kuznetsk coal field, took part in the organization of the Far Eastern Base, Academy of Sciences USSR, and acted as hydrogeological consultant for the Far Eastern Geological Administration (Ural Expedition, Hydrogeological Expedition into the Southern Ussuri Kray, hydrogeological surveys of the Soviet Far East).

At the end of the war, Slavyanov was supervising hydrogeological work at the Academy of Sciences USSR, as well as at the Institute of Health Resorts, on the study of mineral waters of the USSR.

Slavyanov is also renowned for his work as an active member of various societies: Society of Naturalists (Moscow), Mineralogical, Paleontological, and Geographical Societies (Leningrad), Balneological Society (Pyatigorsk), Scientific and Technical Society of Geologists (Moscow), and the International Society of Medical Hydrologists (London). In addition, he is also an honorary member of the Zheleznovodsk Medical Society, Scientific Health Resort Council of the Ministry of Public Health USSR, and the Scientific Technical Council of the Ministry of Geology. From time to time, he is called on as a final authority on matters undertaken by the Scientific Council of Vsegingeo (All-Union Institute of Hydrogeology and Engineering Geology), the Medical Council of the Ministry of Public Health USSR, the Institute of Permafrost Studies of the Academy of Sciences USSR, the Ministry of Chemical Industries USSR, and Gosplan USSR.

As a supplement to his scientific activity, Slavyanov has published more than 100 scientific works and articles. His first work, As a Guest Among the Natives of Khirgiz was published in 1901. (See appended list for works after 1942).

Slavyanov is a much-traveled man and has seen most of the USSR, as well as many sections of western Europe.

Slavyanov can be ranked with fathers of Russian hydrogeology, such as F. P. Savarenskiy, S. N. Nikitin, O. K. Lange, N. F. Pogrebov, and others. He is also well known for his many kind words and deeds, and all of his students considered him their friend as well as their teacher.

In all of his research, Slavyanov attempted to show a relationship between hydrogeological conditions and geology structure and tectonics. In his early days, while still formulating his main course of studies, he developed and improved methods for the discovery and development of subterranean water systems. As a result of his many studies of mud lakes, he developed a special column bathometer which permitted taking samples of lake bottom by layers. Much of his labor went toward the outfitting of proper hydrochemical laboratories for field use.

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In 1946, Slavyanov's many contributions to the science of hydrogeology earned him the title of Corresponding Member of the Academy of Sciences USSR.

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